



April 11, 2008

The Honorable Charles Terreni
Chief Clerk and Administrator
Public Service Commission of South Carolina
Post Office Drawer 11649
Columbia, South Carolina 29211

RE: SCPSC Docket No. 2005-385-E
Responsive Testimony of B. Mitchell Williams

Dear Mr. Terreni:

Enclosed for filing in the above-referenced docket is the Responsive Testimony of B. Mitchell Williams on behalf of Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Len S. Anthony', written over a horizontal line.

Len S. Anthony
Deputy General Counsel – Carolinas

LSA:mhm

cc: Mr. John Flitter
All Parties of Record

262213

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2005-385-E

Petition of the Office of Regulatory Staff to)
Establish Dockets to Consider)
Implementing the Requirements of Section)
1251 (Net Metering) of the Energy Policy)
Act of 2005)

CERTIFICATE OF SERVICE

I, Len S. Anthony, hereby certify that I have placed copies of PEC's Responsive Testimony of witness B. Mitchell Williams in the U. S. Mail on this date, to the parties of record at the addresses shown below, with sufficient postage attached:

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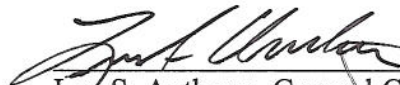
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This the 11th day of April, 2008.



Len S. Anthony, General Counsel
Progress Energy Carolinas, Inc.

April 11, 2008

IN RE: Petition of the Office of Regulatory)	RESPONSIVE TESTIMONY OF
Staff to Establish Dockets to Consider)	B. MITCHELL WILLIAMS
Implementing the Requirements of)	ON BEHALF OF CAROLINA POWER AND
Section 1251 (Net Metering and)	LIGHT COMPANY D/B/A PROGRESS ENERGY
Additional Standards) of the Energy)	CAROLINAS, INC.
Policy Act of 2005)	

8 A. I graduated from North Carolina State University with a B.S. Degree in Agricultural Engineering
9 in 1969. From 1969 to 1973 I was employed as an engineer in transmission and distribution
10 engineering with Virginia Electric & Power Company. In 1973 I joined Carolina Power & Light
11 Company (CP&L) and have since held a variety of positions in customer service, transmission
12 engineering, system planning & operations, demand-side management (DSM), rates and
13 regulatory affairs. I have held various leadership and management roles in regulatory affairs
14 since 1996, currently serving as Manager of Regulatory Affairs. I have served on numerous

1 industry groups and committees related to marketing, DSM, rates and regulatory affairs at the
2 Edison Electric Institute and the Southeastern Electric Exchange. I currently serve on the Board
3 of Directors of NC GreenPower and Palmetto Clean Energy. I am also a member of the Energy
4 Advisory Committee for the South Carolina Energy Office.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

6 A. The purpose of my testimony is to provide PEC's response to the testimony of Pamela Greenlaw,
7 Arno Froese, Frank Knapp, Jr., and Elizabeth M. Smith that was filed on March 28, 2008 in this
8 docket, and testimony of David Odell that was filed on March 31, 2008.

9 Pamela Greenlaw

10 **Q. MS. GREENLAW SUGGESTS THAT THE UTILITIES MAY BE ESTABLISHING UNNECESSARY**
11 **REQUIREMENTS FOR POTENTIAL NET METERING CUSTOMERS. PLEASE RESPOND TO THE**
12 **REQUIREMENTS SHE REFERENCES.**

13 A. PEC's proposed net metering tariffs contain the minimal requirements necessary for PEC to
14 safely integrate customer-owned generation into its system and ensure its non-net metering
15 customers do not unduly subsidize those who choose to net meter. These tariffs are cost-based
16 and only seek to recover the cost PEC incurs to provide electric service to net metering
17 participants. Because a net metering customer causes PEC to incur additional metering-related
18 costs to accommodate the special needs of customers selecting a net metering option the tariff
19 includes a charge to recover this cost. It is appropriate to recover the cost of providing retail
20 service to net metering customers under a tariff that recovers all costs incurred, including the
21 transmission and distribution system used by the customer when his or her generation is not
22 sufficient or available to meet his or her needs. Again, these are cost-based charges associated
23 with serving these customers.

1 Q. PLEASE RESPOND TO MS. GREENLAW'S COMMENTS REGARDING: (1) THE TRANSPARENCY OF
2 PEC'S NET METERING TARIFF; (2) ZEROING OUT OF A CUSTOMER'S EXCESS GENERATION EACH
3 YEAR WITHOUT COMPENSATION; AND (3) THE AMOUNT AND BASIS OF THE CHARGES IN THE
4 TARIFF.

5 A. Ms. Greenlaw expresses concern with the selection of the on-peak and off-peak hours
6 contained in PEC's time-of-use rates, which PEC proposes to use to both charge net metering
7 customers and credit net metering customers. These hours reflect the times when PEC
8 experiences peak electricity use on its system. The price signals in the tariff are designed to send
9 pricing signals to customers that reflect the variance in PEC's cost of providing service and
10 provide incentives to them to use less during the peak times. Unfortunately, the system peak
11 usage times do not coincide with peak sunshine. PEC's winter peak occurs in the early morning,
12 typically from 6 a.m. to 8 a.m., during hours when PV systems have little or no output;
13 therefore, the utility avoids no generation due to the PV system.

14 Regarding her concern with the zeroing out of a customer's excess generation each year without
15 compensation, PEC agrees with Ms. Greenlaw's testimony that in most of the installations at
16 occupied residences, there will never be excess generation at year-end. This provision is
17 included in the net metering riders to ensure that in the rare situation where net excess
18 generation exists, PEC is not required to maintain records across multiple years. If a customer
19 does install a system that produces a material amount of excess generation the customer can
20 contract for PEC to purchase excess generation under the avoided cost rates.

21 Turning to Ms. Greenlaw's concerns with the fees and charges in PEC's proposed tariff, it
22 appears she does not understand the charges to be assessed. The Basic Facilities Charge in
23 Schedule RES-TOUD is \$9.60 and the Basic Facilities Charge in Schedule RES when coupled with
24 the Metering Facilities Charge in Rider NME is \$6.50 plus \$3.10 or a total monthly charge of

1 \$9.60. In both cases the monthly charge recovers the additional cost PEC will incur to provide
2 time-of-use metering. This metering is required to accurately measure the impact of the PV
3 system on PEC's grid.

4 Ms. Greenlaw expresses concern with demand charges when a net metering customer selects a
5 time-of-use schedule. We hope Ms. Greenlaw understands that the Residential Time-of-Use
6 Demand (R-TOUD) Schedule seeks to recover the same costs during the month as would be
7 received under the standard flat rate residential tariff. That is the cost of the utility
8 infrastructure built and maintained to serve that customer. It simply uses a rate design that
9 more accurately reflects the cost PEC incurs to serve the customer on an hourly basis. The R-
10 TOUD Schedule does offer participants more appropriate price signals that recognize that PEC's
11 costs vary by season and time of day, therefore, if load can be shifted from high cost times to
12 low cost times, the customer can reduce the utility's cost and their monthly bill. PEC's rate
13 design includes both a demand charge that seeks to recover primarily the infrastructure cost of
14 producing and delivering electricity to the customer (i.e., generation, transmission and
15 distribution facilities), and energy charges that recover primarily fuel and related costs required
16 to produce the kilowatt hours (kWh) being consumed by the customer. To the extent the
17 customer reduces his or her peak demand, PEC avoids the need for generation, transmission
18 and distribution facilities and the customer receives a lower bill. The inclusion of a demand
19 charge in a tariff design is well founded in pricing theory and is an appropriate way to align rates
20 with actual cost causation.

21 **Q. MS. GREENLAW RECOMMENDS THAT: (1) THE FACILITIES CHARGE SHOULD BE IDENTICAL TO**
22 **THOSE IMPOSED FOR CUSTOMERS IN CLASSES OF SIMILAR TYPE AND POWER NEEDS; (2)**
23 **DEMAND CHARGES SHOULD BE ELIMINATED; (3) DESIGNATION OF ON-PEAK AND OFF-PEAK**
24 **HOURS SHOULD BE THE SAME FOR ALL POWER CUSTOMERS WITHIN THE JURISDICTION OF**

1 THE SAME UTILITY; (4) UTILITIES SHOULD CREDIT GENERATORS FOR NET EXCESS GENERATION
2 ONE-FOR-ONE AT THE RETAIL RATE UNDER A FLAT RATE SYSTEM; AND (5) UTILITIES SHOULD
3 PURCHASE NET EXCESS GENERATION AT THE END OF A BILLING YEAR. ARE THESE CHANGES
4 TO PEC'S PROPOSED NET METERING RIDERS APPROPRIATE?

5 A. No. Both of PEC's net metering proposals charge the same monthly Basic Facilities Charge to all
6 customers requiring a time-of-use meter; therefore, her first recommendation is already
7 satisfied. Her recommendation to eliminate demand rates is also already resolved by the
8 Commission's earlier decision that allows customers to continue to receive service under the
9 standard fixed rate tariff, without demand charges, assuming one is applicable to their load
10 requirement. Her third recommendation is also fully met, except the nonresidential on-peak
11 period in the summer months of April through September ends at 9 p.m., while the on-peak
12 period for nonresidential customers extends to 10 p.m. If the intent of her recommendation is
13 to adopt the summer on-peak period year-round, this is inappropriate since it would fail to
14 recognize that PEC's winter peak occurs in the early morning, not late afternoon. PEC's proposal
15 also meets her fourth recommendation if the customer elects the flat rate option, to the extent
16 the customer's generation reduces normal purchases from PEC. By reducing normal purchases
17 from the utility, the customer will avoid purchasing that power at the full tariff rate. Under this
18 net metering option, any net excess generation that flows to the utility grid would be credited at
19 the utility's avoided energy cost. The Commission has ruled that the rates contained in the
20 Cogeneration and Small Power Producer Schedule CSP appropriately value energy delivered to
21 the grid; therefore, paying a credit in excess of these avoided cost rates results in a subsidy by
22 other ratepayers. Her final recommendation involves offering a credit or future benefit for any
23 excess net generation that exists at year-end. While PEC believes that such a situation would
24 be rare, if it does occur the customer generator can always enter into a purchase arrangement

1 under Schedule CSP to be compensated for this excess generation; therefore, this should not be
2 a problem with the current rate design.

3 **ARNO FROESE**

4 **Q. MR. FROESE SUGGESTS THAT THE PUBLIC SERVICE COMMISSION SHOULD TAKE IMMEDIATE**
5 **STEPS TO ENCOURAGE CITIZENS THROUGHOUT THE STATE TO PRODUCE GREEN POWER**
6 **“WHETHER HYDRO, SOLAR, WIND OR OTHER.” DOES PEC CONCUR WITH THIS SUGGESTION?**

7 **A.** PEC believes that the Commission has already undertaken the appropriate steps to encourage
8 customer-owned generation by the adoption of standard interconnection practices, approval of
9 avoided cost rates appropriate for the purchase of customer-produced generation and the
10 consideration of net metering options. These tariffs have been designed to minimize subsidies
11 by other ratepayers and ensure that the customer/generator receives the benefit of all cost
12 avoided by the utility due to the installation of the customer’s generation. PEC believes that the
13 introduction of the Palmetto Clean Energy Rider PaCE will also increase citizen awareness of
14 green power and help facilitate green power growth in South Carolina.

15 **FRANK KNAPP, JR.**

16 **Q. MR. KNAPP NOTES SEVERAL AREAS OF CONCERN WITH NET METERING PROGRAMS. PLEASE**
17 **RESPOND TO HIS CONCERNS.**

18 **A.** Mr. Knapp primarily cites the report “Freeing the Grid” published by the Network for New
19 Energy Choices, Interstate Renewable Energy Council, The Vote Solar Initiative, and the Solar
20 Alliance and examples offered by the North Carolina Sustainable Energy association as the basis
21 for many of his concerns. PEC’s net metering proposals adequately address all of the concerns
22 he notes, except PEC’s net metering tariffs are limited to 20 kW for a residential applicant and
23 100 kW for a nonresidential applicant. This doesn’t mean that larger installations aren’t
24 permitted; they just wouldn’t automatically be addressed by the tariff. PEC sought this limit

1 until it gained more experience with customer-owned generation to be certain unexpected costs
2 or safety impacts weren't incurred. Larger installations also present standby service issues that
3 are not applicable to smaller installations. PEC will negotiate appropriate rate treatment with all
4 larger installations, consistent with the approved net metering tariffs.

5 **Q. MR. KNAPP EXPRESSES HIS CONCERN THAT IT IS NOT APPROPRIATE TO MODEL A SOUTH**
6 **CAROLINA NET METERING PROGRAM AFTER NORTH CAROLINA BECAUSE NORTH CAROLINA**
7 **ONLY HAS ONE COMMERCIAL NET METERING CLIENT AS OF MARCH 24, 2008 AND THE**
8 **INTERSTATE RENEWABLE ENERGY COUNCIL RATES NORTH CAROLINA'S NET METERING**
9 **PROGRAM WITH A GRADE OF "F". PLEASE RESPOND TO THESE CONCERNS.**

10 **A.** Mr. Knapp and the Interstate Renewable Energy Council report fail to recognize the influence of
11 the NC GreenPower program on rate options available to customer generators. The NC
12 GreenPower program provides a significant financial incentive to encourage customers to sell all
13 of the generator output to PEC, rather than net meter. In fact, the NC GreenPower program
14 reports that more than 150 PV installations were participating in their program at the end of
15 March 2008.

16 Interest in customer-owned generation is increasing in North Carolina. In its annual report to
17 the North Carolina Utilities Commission for customer generator activities in 2006, PEC reported
18 a single PV installation that was interconnected and a single landfill gas-powered generator
19 installation. In its 2007 report, 26 residential and 8 nonresidential installations were cited.
20 While it is true that PEC only serves one of these accounts under its net metering rate option,
21 the reason is because it is more financially lucrative for the customer to sell all of the generator
22 output to PEC and participate in the NC GreenPower program rather than consuming the power
23 under a net metering rate option. PEC believes that its North Carolina net metering rate option

1 appropriately meets its customers' needs and fosters the installation of renewable generation
2 resources.

3 **ELIZABETH M. SMITH**

4 **Q. MS. SMITH INDICATES THAT SHE BELIEVES CUSTOMERS HAVE EXPRESSED LIMITED INTEREST**
5 **IN TIME-OF-USE TARIFFS. HASN'T PEC REALIZED SIGNIFICANT INTEREST FROM ITS**
6 **CUSTOMERS IN TIME-OF-USE TARIFFS?**

7 **A.** PEC has found that time-of-use tariffs are attractive to customers that can actively shift usage
8 from on-peak hours to off-peak hours by the use of time clocks or manually deferring the use of
9 certain electric appliances to off-peak hours. PEC has offered time-of-use rate options since the
10 1970s and has determined that the majority of residential customers prefer the time-of-use
11 schedule that includes a demand charge. As of the end of 2007, PEC served 2,163 of its
12 residential customers under its Residential Service Time-of-Use Demand Schedule R-TOUD and
13 58 residential customers under its Residential Service Time-of-Use All-Energy Schedule R-TOUE.
14 As the participation rates show, a time-of-use tariff with a demand rate has been well accepted
15 by PEC customers and is greatly preferred over an all-energy rate design.

16 **Q. MS. SMITH RECOMMENDS THAT CUSTOMERS BE GIVEN A CHOICE OF RATES – ONE A TIME-OF-**
17 **USE RATE AND THE OTHER THE OPTION TO NET METER WITH THE EXISTING RATE. HASN'T**
18 **THE COMMISSION ALREADY DIRECTED THE UTILITIES TO OFFER THESE TWO OPTIONS?**

19 **A.** Yes, PEC has proposed two net metering tariffs. The first requires the use of a time-of-use tariff
20 with demand rates while the second allows the customer to continue service under an existing
21 flat rate tariff.

22 **Q. MS. SMITH SEEMS TO BELIEVE THAT NORTH CAROLINA HAS ABANDONED ITS CURRENT NET**
23 **METERING PATH AND REPLACED IT WITH A RENEWABLE PORTFOLIO STANDARD. IS THIS**
24 **CORRECT?**

1 A. No. The North Carolina General Assembly's establishment of a renewable portfolio standard
2 (RPS) is in addition to its support for net metering. North Carolina's promotion of customer-
3 owned generation has evolved over many years as the renewable generation industry has
4 standardized its equipment and utilities have gained experience safely coordinating customer-
5 owned generation with the utility grid. The first step in this evolution was the adoption of
6 avoided cost rates in response to PURPA requirements in the 1980s. Similar to actions taken by
7 this Commission, the North Carolina Utilities Commission took appropriate actions to introduce
8 avoided cost tariffs in the 1980s to promote customer-owned generation. In 2004, the North
9 Carolina Utilities Commission approved standard interconnection processes for all utilities in the
10 state to further simply customers' ability to install generation. A similar interconnection tariff
11 was approved by this Commission. The North Carolina Utilities Commission also began an
12 evaluation of net metering options which culminated in the adoption of a Net Metering Rider in
13 2006. In 2007, the North Carolina General Assembly, as part of a comprehensive energy bill,
14 approved a Renewable Portfolio Standard requirement for all utilities. The North Carolina
15 General Assembly and the North Carolina Utilities Commission have added a Renewable
16 Portfolio Standard as another policy to encourage renewable generation. The RPS, coupled with
17 net metering, NC GreenPower, avoided cost tariffs and small generation interconnection
18 standards all provide a comprehensive set of options to encourage renewable generation.

19 **DAVID ODELL**

20 **Q. MR. ODELL ALLEGES THAT THE CURRENT UTILITY NET METERING PROPOSALS ARE LACKING IN**
21 **TWO RESPECTS. HE FIRST STATES THAT EVERY ADDITIONAL FIXED MONTHLY CHARGE**
22 **REDUCES THE GENERATING SYSTEM COST EFFECTIVENESS. HE ALSO STATES THAT THE**
23 **PROPOSED FLAT-RATE TARIFF CREDITS EXCESS GENERATION AT ON-PEAK AND OFF-PEAK**

1 AVOIDED COST RATES, RATHER THAN THE FULLY LOADED TARIFF RATE, FURTHER REDUCING
2 THE COST-EFFECTIVENESS. DOES PEC AGREE WITH MR. ODELL?

3 A. While it is obviously true that any charge paid by a customer generator to the utility will reduce
4 the cost-effectiveness of the PV system, it is inappropriate for the utility to incur costs to serve
5 the net metering customer and then to shift these additional costs to other ratepayers so that
6 the PV operation is more profitable. Assignment of cost recovery based upon "cost causation" is
7 a basic tenet of ratemaking and is reflected in all utility rate designs. PEC's proposed net
8 metering tariffs appropriately balance cost causation in its rate design to ensure that net
9 metering customers receive adequate service at a reasonable rate without shifting costs to non-
10 participants. If customers were to receive the full retail tariff rate as a credit for excess
11 generation, the customer would be paid much more than the energy he or she produces is
12 worth. PEC's retail rates are designed to recover all of its costs: generation, transmission and
13 distribution. A net metering customer's generation does not allow PEC to avoid any
14 transmission or distribution costs.

15 Q. MR. ODELL STATES THAT UNDER THE FLAT RATE OPTION THE PROPOSED TARIFF WORKS
16 AGAINST PEAK-SHAVING BENEFITS SINCE CUSTOMERS WILL BE ENCOURAGED TO WASH
17 DISHES OR CLOTHES IN THE DAY TO COINCIDE WITH THE MAXIMUM OUTPUT FROM THEIR PV
18 SYSTEM. DOES PEC BELIEVE THAT ITS RATE DESIGN WOULD ENCOURAGE THIS REACTION?

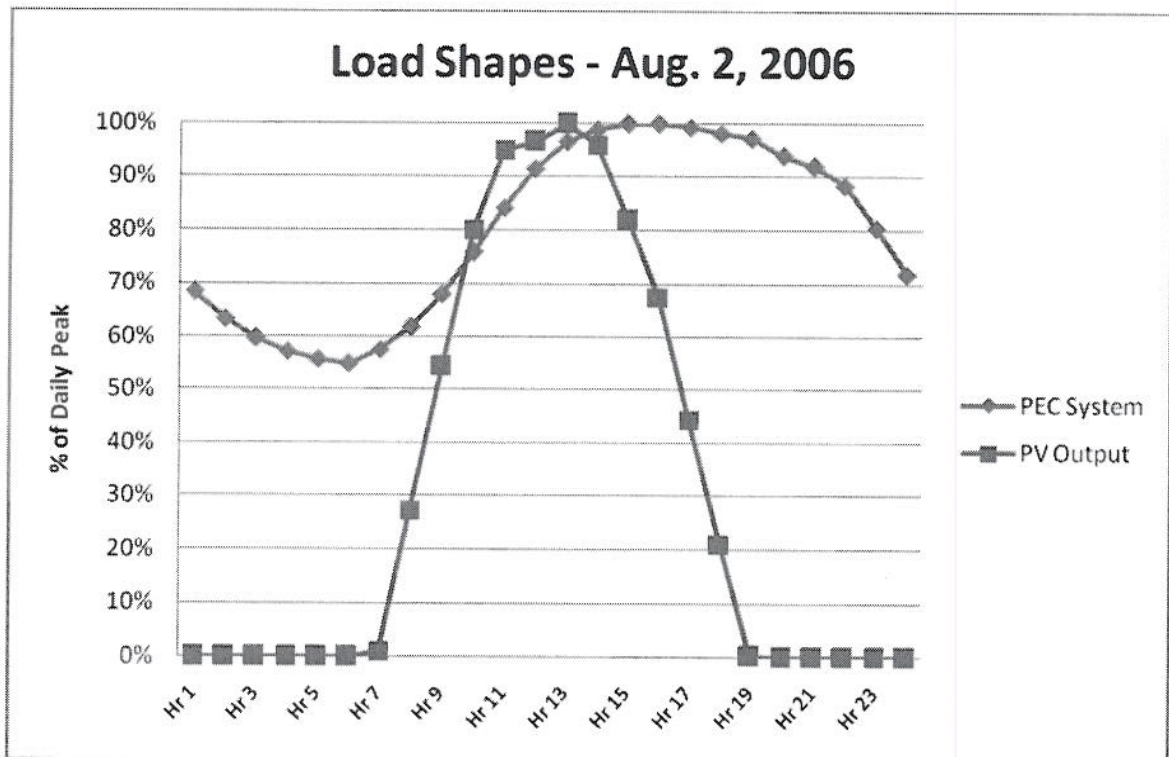
19 A. Mr. Odell's comment is more a condemnation of flat rates that fail to recognize utility peaks
20 than of the net metering proposal. One could argue that this could be solved by requiring the
21 use of a time-of-use tariff, as originally proposed by the utilities. The primary cause of PEC's
22 summer peak is increased air conditioning that most customers don't want to defer because of a
23 decline in comfort. To the extent PV customers have air conditioning, their summer load would
24 naturally increase to coincide with increased production from their PV system therefore there

1 shouldn't be significant excess generation. Of course this will vary dependent upon the size of
2 the generation system and the individual customer's electrical appliances and schedule. As
3 PEC gains experience with PV residential installations, excess generation can be reviewed to
4 verify that the rider fairly compensates the net metering customer for their impact on PEC's
5 system and ultimately other ratepayers.

6 **Q. MR. ODELL DISCUSSES THE BENEFITS TO ALL RATEPAYERS OF PV INSTALLATIONS SINCE,**
7 **SIMILAR TO ENERGY EFFICIENCY IMPACTS, THEY WILL REDUCE THE NEED FOR UTILITY**
8 **INVESTMENT. DO YOU AGREE WITH HIS CONCLUSION?**

9 A. Not entirely. While the effect on the utility's load may be similar, most energy efficiency
10 measures have a more beneficial impact because, unlike PV systems, any reduction in usage will
11 most likely coincide with the utility peak. PV systems are dependent upon the hours with
12 maximum sunlight, which don't always coincide with the utility peak. Also energy efficiency
13 measures like added insulation or weather-stripping typically reflect permanent changes to a
14 customer's structure that, unlike PV systems, won't change on cloudy days or if the PV system
15 breaks. Because they are permanent changes, PEC can permanently reduce its facilities.

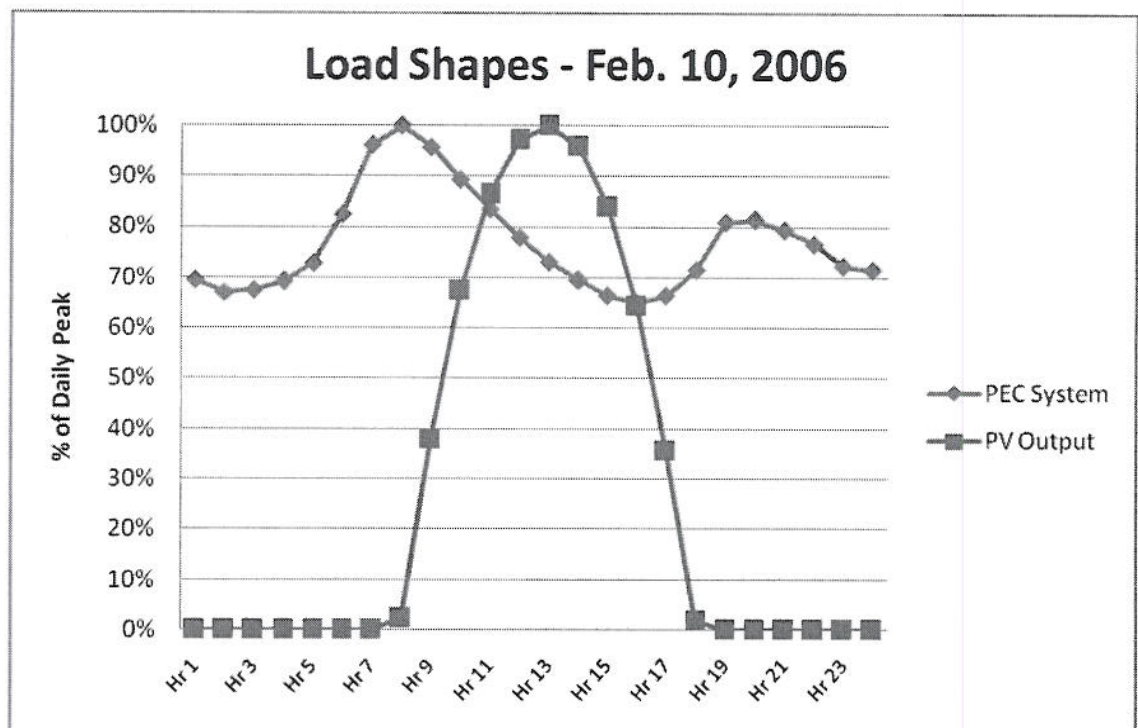
16 For illustrative purposes, I have created charts of PEC's summer and winter peak to show how
17 PEC's load varies throughout the day and by season. I have also included the corresponding
18 output from a PV system to contrast the output of the PV system to the system peak. The
19 output of the PV system was obtained from the NC Solar Center at North Carolina State
20 University.



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Chart 1: PEC and solar output on a summer peak day



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Chart 2: PEC and solar output on a winter peak day

1 As shown in Chart 1, the solar system's output peaks at approximately 3 p.m. and declines
2 thereafter. This differs from the utility peak that reaches its maximum value from 5 to 6 p.m. as
3 people arrive at home from their jobs. Chart 2 illustrates PEC's winter peak which typically
4 occurs from 6 to 8 a.m. when little or no PV output is available. While there is clearly a
5 beneficially effect on the utility's peak from the PV system in the summer, it is not as great as
6 realized with energy efficiency and conservation measures that more closely correlates to the
7 utility peak.

8 **Q. IN REFUTING UTILITY CONCERNS WITH CROSS-SUBSIDIZATION BY OTHER RATEPAYERS OF**
9 **COSTS INCURRED TO SERVE NET METERING CUSTOMERS, MR. ODELL ARGUES THAT NET**
10 **METERING IS NO DIFFERENT THAN ENERGY EFFICIENCY WHERE THE CUSTOMER IS NOT**
11 **CHARGED ANY SPECIAL PAYMENTS TO ADDRESS THEIR REDUCED CONTRIBUTION TO FIXED**
12 **COSTS. IS THIS A VALID COMPARISON, AND IF NOT, WHY?**

13 **A.** It is not a valid comparison. First, when customers implement energy efficiency measures the
14 customer realizes lower consumption and a reduced bill while the utility realizes a reduction in
15 peak requirement and a corresponding long-run reduction in the need for infrastructure. There
16 is no additional investment in metering required to accommodate the customer implementing
17 energy efficiency and no back-feed of excess power because the measure doesn't coincide with
18 the customer's consumption. Standby power considerations aren't applicable because the
19 measure isn't impacted by weather conditions or equipment issues. While both a PV system
20 and an energy efficiency measure reduce power normally provided by the utility, the impact and
21 costs created by each approach are totally different.

22 **Q. MR. ODELL STATES THAT THE MINIMAL EXCESS GENERATION FROM A PV SYSTEM DOESN'T**
23 **JUSTIFY A DUAL METER APPROACH. DOES PEC AGREE?**

1 A. PEC can't comment on how much excess generation would be produced because it totally
2 depends upon the customer's decisions when sizing the PV system and consuming power, but
3 all indications are that there will be a minimal back-feed to the utility from most customers. If a
4 customer doesn't seek credit for the small amount of excess electricity that could flow back to
5 the grid, PEC will allow them to remain under their current tariff, without any additional
6 charges. They would still need to go through the interconnection process to ensure safe
7 operation and PEC would place detents in their metering to ensure they were not charged for
8 any excess generation output. This is no longer a net metering application, but is acceptable to
9 PEC if it better meets the customer's needs.

10 **Q. MR. ODELL STATES THAT THE USE OF VOLUNTARY CONTRIBUTIONS TO PROVIDE INCENTIVE**
11 **FOR RENEWABLE GENERATION AS SEEN WITH THE PALMETTO CLEAN ENERGY (PACE)**
12 **PROGRAM IS A FLAWED APPROACH. DOES PEC AGREE?**

13 A. No. PEC's experience with the NC GreenPower program has been excellent as the number of PV
14 installations has increased from nearly zero to over 150 in the past year, in spite of the fact that
15 PV systems costs thousands of dollars, and even with federal and state tax credits will take a
16 long time to be cost effective based upon the cost of electricity alone. Promotion of renewable
17 generation is not an overnight solution where a single action can instantly create a market. The
18 steps this Commission has already taken to address interconnection standards, avoided cost
19 rates and now net metering will work in the long run to promote renewable resources.
20 Technological changes are also occurring to help drive down the entry cost for customer-owned
21 generation. I'm certain Mr. Odell would appreciate a quick solution that would instantly create
22 a market for his business, but this should not be done by unfairly shifting costs incurred in
23 providing the net metering service to other ratepayers. Mr. Odell should also remember that

1 decisions made today by the Commission can always be revised at a later date as the utilities
2 gain experience with customer-owned small generators.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 **A. Yes.**